FILE 'HOME' ENTERED AT 09:17:33 ON 08 MAR 2003)

FILE 'MEDLINE, CANCERLIT, CAPLUS, EMBASE, BIOSIS, BIOTECHDS' ENTERED AT 09:18:16 ON 08 MAR 2003

L1 96596 S TISSUE SPECIFIC OR CANCER CELL SPECIFIC OR TUMOUR SPECIFIC OR
L2 10308 S E2F OR E2F1
L3 197 S L1 AND L2
L4 106825 S ADENOVIR?
L5 41 S L4 AND L3
L6 21 DUP REM L5 (20 DUPLICATES REMOVED)

=>

L6 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2003 ACS
AN 2000:191239 CAPLUS
DN 132:247146
TI **Adenovirus** vectors containing cell status- and cell type-specific response elements for transcriptional regulation and their use in cancer gene therapy
IN Yu, De Chao; Henderson, Daniel R.
PA Calydon, Inc., USA
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000015820	A1	20000323	WO 1999-US20718	19990910
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2001053352	A1	20011220	US 1999-392822	19990909
	CA 2343135	AA	20000323	CA 1999-2343135	19990910
	AU 9959162	A1	20000403	AU 1999-59162	19990910
	EP 1112371	A1	20010704	EP 1999-946842	19990910
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002525063	T2	20020813	JP 2000-570347	19990910
PRAI	US 1998-99791P	P	19980910		
	US 1999-392822	A	19990909		
	WO 1999-US20718	W	19990910		

AB **Adenoviral** vectors contg. one (or more) of **adenovirus** gene(s) under the control of transcriptional regulatory elements (TRE) with cell status- and cell type-specificity are described for cancer gene therapy. One **adenovirus** vector carrying the first gene (preferentially an **adenovirus** gene essential for viral replication like E1A, or E1B) and another **adenovirus** vector carrying the second gene (generally a therapeutic gene that can contribute to killing of the target cell like another **adenovirus** essential gene or **adenovirus** death protein ADP gene) can complement each other and enable **adenovirus** to replicate in the specific target cells and kill them. The cell-status specific elements, generally related to a physiol. and/or environmental state in cancer cells, can be a hypoxia response element (HRE) of rat enolase-1 gene, or a cell cycle-specific TRE of human **E2F1**. The cell type-specific response elements such as prostate-specific antigen (PSA)-TRE contg. enhancer and promoter sequence of PSA gene is used to confer the **tumor specific** toxicity in gene therapy. Methods of constructing and using **adenovirus** vectors for E1A under the control of a enolase-1 gene HRE and PSA-TRE are provided.

L6 ANSWER 19 OF 21 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1998-00976 BIOTECHDS
TI Tumor-selective transgene expression in vivo mediated by an **E2F**
-responsive **adenoviral** vector;
adeno virus vector construction for **tumor-specific**
gene expression
AU Parr M J; Manome Y; Tanaka T; Wen P; Kufe D W; Kaelin Jr W G; *Fine H A
CS Dana-Farber-Cancer-Inst.; Harvard-Med.Sch.
LO Center for Neuro-Oncology, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA 02115, USA.
SO Nat.Med.; (1997) 3, 10, 1145-49
CODEN: 6907M ISSN: 1078-8956
DT Journal
LA English
AB An adeno virus (AV) vector, Ad.**E2F1**-b-gal, was constructed that uses the **E2F**-1 promoter (bp -218 to +51) to drive expression of an Escherichia coli beta-galactosidase (b-gal, EC-3.2.1.23) gene placed in the E1 region of an E1/E3-deleted AV vector. Transduction of proliferating C6 glioma cells by Ad.**E2F1**-b-gal resulted in high-level expression of b-gal activity in a titer-dependent manner. To determine whether Ad.**E2F1**-b-gal could mediate cell cycle-dependent transgene expression in vitro, C6 cells were serum-starved, transduced with Ad.**E2F1**-b-gal or with Ad.CMV-b-gal (identical except for the presence of a cytomegalo virus early promoter rather than the **E2F**-1 promoter) and then re-exposed to serum. Results indicated that Ad.**E2F1**-b-gal-mediated transgene expression is induced following entry into and/or progression through the cell cycle. The tumor-selective properties of Ad.**E2F1**-b-gal were demonstrated by injecting directly into normal rat brains and rat brains with established C6 gliomas. Further studies showed that the **E2F**-1 promoter was de-repressed in vivo, and this can be exploited to design vectors that mediate tumor-selective gene expression. (24 ref)